



THE AGA KHAN UNIVERSITY

eCommons@AKU

Community Health Sciences

Department of Community Health Sciences

June 2008

Prevalence of behavioural and psychological problems in working children

Salman Bandeali

Aga Khan University

Ahmed Jawad

Aga Khan University

Asma Azmatullah

Aga Khan University

Hammad Bin Liaquat

Aga Khan University

Iram Aqeel

Aga Khan University

See next page for additional authors

Follow this and additional works at: http://ecommons.aku.edu/pakistan_fhs_mc_chs_chs

Recommended Citation

Bandeali, S., Jawad, A., Azmatullah, A., Liaquat, H., Aqeel, I., Afzal, A., Umal, A., Abidi, K., Israr, S. (2008). Prevalence of behavioural and psychological problems in working children. *Journal of the Pakistan Medical Association*, 58(6), 345-9.

Available at: http://ecommons.aku.edu/pakistan_fhs_mc_chs_chs/27

Authors

Salman Bandeali, Ahmed Jawad, Asma Azmatullah, Hammad Bin Liaquat, Iram Aqeel, Aisha Afzal, Azmat Umal, Kashan Abidi, and S. M. Israr

Prevalence of Behavioural and Psychological Problems in Working Children

Salman Bandeali¹, Ahmed Jawad¹, Asma Azmatullah¹, Hammad Bin Liaquat¹, Iram Aqeel¹, Aisha Afzal¹, Umal Azmat¹, Kashan Abidi¹, S.M.Israr²

Medical Students¹, Department of Community Health Sciences², Aga Khan University, Karachi.

Abstract

Objective: To determine the prevalence and screen the nature and types of behavioural and psychological problems among working children in Karachi.

Methods: A cross sectional study was conducted in three urban squatter settlements of Karachi from May to June 2006, targeting working children aged 11-16 years. Behavioural Problems of these children were estimated by using the self reported Urdu version of the Strengths and Difficulty Questionnaire. The results were cross-tabulated using SPSS 13.0 with the identified risk-factors.

Results: Out of a total of 225 respondents, 94.2% (n=212) males and 5.8% (n=13) females, the prevalence of Behavioural Problems among working children was found to be 9.8%. Peer problems were most prevalent (16.9%) seconded by Conduct problems (16.7%). Adverse family environment and work environment were closely associated with Behavioural Problems in these children.

Conclusion: Our study reinforces the need for measures to improve the environment of the children and prevent the psychological and behavioural problems associated with working children. Gradual, long term policies are required to decrease the need for working children, though sudden abolishment would cause more detrimental effects (JPMA 58:345;2008).

Introduction

UNICEF declares that as long as hundreds of millions of children are forced to work when they should be learning and playing, the world will not achieve its long-term development goals.¹ Worldwide, there are an estimated 246 million children engaged in child labour. Employment status by broad categories indicates that about 70% of the working children are unpaid family helpers. Significant urban-rural differentials are observed in their employment status. About 46% of the working children work more than 35 hours per week and a good proportion work 56 hours or more.

The term child labour covers a wide range of situations, to which the ethical, economic and legal response could be very different. To begin with, it is not clear how to define "child". In the West, it is customary to do so by chronological age, but in many societies cultural and social factors enter as well.² The evolution of a child to adulthood passes through socially and biologically defined life phases, over which the degree of dependence and the need for protection of the child gradually declines, e.g., in many societies an apprentice even if only eight or nine years old is often not considered a child - a determination based on social status rather than age.³

Child labour is a pervasive problem affecting all regions throughout the world, especially in developing countries. Africa and Asia together account for over 90 percent of total child employment. According to ILO⁴

estimates in April 2002, about 211 million between the ages 5-14 are working, mostly in developing countries, half of them work full time almost everyday.⁵

Child labour is especially prevalent in rural areas where the capacity to enforce minimum age requirements for schooling and work is lacking. Children work for a variety of reasons, the most important being poverty and the induced pressure upon them to escape from this plight. Though children are not well paid, they still serve as major contributors to family income in developing countries. Schooling problems also contribute to child labour, whether it is the inaccessibility to schools or the lack of quality education that spurs parents to enter their children in more profitable pursuits. Traditional factors such as rigid cultural and social roles in certain countries further limit educational attainment and increase child labour.⁶ (SDPI, 2005)

Pakistan has a population of 144 million, of which 69.8 million are children below 18 years. The Human Rights Commission in 2001 estimated the number of Pakistani working children to be around 11-12 million, of which, only 3.3 million (or 8.3% of the total children) are on the payroll.⁷ Most of the child workers (73%) were boys.⁸

Working children are the objects of extreme exploitation in terms of toiling for long hours for minimal pay. The International Labour Office reports that children work the longest hours and are the worst paid of all labourers.⁹ A study done in Bhutta Village, Pakistan in 2002 reported that children had an average monthly income of

Pak Rupees 615 (US \$ 10).¹⁰

There are numerous risk factors and stressors which can affect the psychopathology of the children. There is sufficient evidence that most children have the resources to cope with one risk without serious developmental consequences. However the accumulation of many risk factors renders children vulnerable to psychopathology and other negative outcomes.¹¹ It has been argued that these factors combine in a multiplicative manner. Although working may be a protective factor in extremely low socio-economic conditions, providing relief and economic reward to negate the financial deprivation, absence of protective factors may amplify the risk to the children's well being.

The human rights abuses in the workplace are clear and acute and needless to say along with physical damage there is severe psychological damage to these children also. A study in India on children working in cottonseed industries demonstrated that they were victims of physical and verbal abuse that could contribute to significant physical and psychological morbidity.¹² Different approaches have been suggested by various researchers to basically assess the risk versus benefit ratio of the working children and address the problem accordingly.¹³ Although children have been studied on physical morbidities, not much research has been done addressing behavioural problems in working children, especially in Pakistan. This study intended to address this issue, focusing on the behavioural and psychological problems among working children in Karachi..

Methods

A cross sectional study was conducted from May to June, 2006 in three urban squatter settlements of Karachi namely; Sultanabad, Essa Nagri and Hijrat Colony. The study sites were selected purposely due to the known high prevalence of working children and the easy physical accessibility for the investigators.. The data was collected in a sample of 259, which was proportionately divided within the three squatter settlements according to the number of households in each population. The selection criteria of the study population included: children of either sex, between the ages of eleven and sixteen, and working outside their homes in any capacity (e.g. at homes, shops, garages and industries.). Children working for less than one month were excluded.

In the absence of a sampling framework and the prior knowledge of the composition of study subjects, a household was selected randomly in each study population, and every second household was approached thereafter to identify the study subjects. The study purpose was explained to each parent and the child, and the written

consent was sought ensuring confidentiality of the collected information before interviewing the child. Timing of data collection was adjusted to minimize refusals due to unavailability of the children. As most of the risk factors were similar within siblings, only one child was selected randomly from a household. No incentives were provided in order to avoid any form of bias.

We used a self reporting questionnaire where children unable to read and write were assisted by the research team. The questionnaire comprised of an initial section on demographic information, and a second section on the behavioural and psychological problems among working children using a universally validated screening tool known as "The Strengths and Difficulties Questionnaire" (SDQ).¹⁴ An Urdu self-reporting version of SDQ was used. This screening tool assesses 25 attributes and categorizes behavioural and psychological problems into 5 main divisions, namely emotional problems, conduct problems, hyperactivity/inattention, peer relationship problems and pro-social behaviour. Respondents rated their answers as "Not True", "Somewhat True", or "Certainly True".

Self-constructed questions to identify possible risk factors of behavioural and psychological problems in working children were added to the questionnaire. These included 12 questions regarding work related factors such as decision to start working, atmosphere at work place, total monthly salary, and 11 questions regarding family related factors such as household income, number of earning members and family atmosphere.

The tool was pre-tested before the data collection. The data was entered using EpiData 3.1 and analyzed in SPSS 13.0. The SDQ part of the questionnaire was scored as per its guidelines available on the SDQ website¹⁴, whilst the self-constructed risk factors part of questionnaire was coded according to a pre-decided marking scheme.

Results

Out of 259 selected participants, 225 agreed to participate in the study. The refusals were due to the lack of time and unwillingness of the head of the family. There were 94.2% (n=212) male and 5.8% (n=13) female children. (The mean age of the respondents was 14.36 ± 1.84 years with a range of 11-16 years.

Most of these children (58.2%) worked in nearby shops either self-employed or otherwise, while others included mechanics, labour work, as a waiter, in factories/mill or doing domestic work. Children working for more than ten hours were 41.3% whereas 40.2% reported 5-10 hours a day. The earning of at least Rs. 2000 (\$33) a month, was reported by 36.4% while one fourth of these

children were not paid at all. The work environment was generally considered friendly (91%) by the respondents, although few reported of verbal (4.0%) and physical (3.6%) abuse.

The reported reasons to work included support to the family (32.9%) or to learn the art of trade (31.6%). This decision to start work was mostly taken by the parent or the guardians of the child and hence 51.1% of the children did not have a choice to quit or change their profession. However, 91 % of the children said they enjoyed their work.

The family structure of these children had a mean size of 8.76 ± 3.17 (95% C.I. 8.34-9.18). The mean number of earning members excluding the respondent and total number of siblings in the household were 2.36 ± 1.23 (95% C.I. 2.18-2.53) and 5.88 ± 2.19 (95% C.I. 5.59-6.17) respectively.

The SDQ part of the questionnaire, as per its scoring criteria mentioned on the website was divided into six parts: Total difficulty Score (TDS) (max score of 40), Peer problems Score, Emotional Problems Score, Conduct problems Score, Hyperactivity Score and Pro-social behaviour (max score of 10 each). The TDS was calculated by summing the individual scores of all of the other components except Pro-social Behaviour. These scores were further coded into three categories of Normal, Borderline and Abnormal, using the scales tested for their reliability and validity in previous studies. (Table.1)

The prevalence of Behavioural Problems (an abnormal TDS score) came out to be 9.8% (n = 21). The mean total difficulty score was 11.48 (S.D.5.95). (Table.2.). Of the five subsets of problems, peer problems were most

Table 1. Scoring System of the Strengths and Difficulties questionnaire.

Scoring Criteria	Normal	Borderline	Abnormal
Total Difficulty Score	0-15	16-19	>20
Peer Problem	0-3	4-5	6-10
Emotional Problems	0-5	6	7-10
Conduct Problems	0-3	4	5-10
Hyperactivity problems	0-5	6	7-10
Pro-social behavior	6-10	5	0-4

Table 2. Prevalence and Mean Score of various behavioural problems

Score	Mean	95% CI	Borderline	Abnormal	Borderline + Abnormal
Total Difficulty Score	11.48	10.70-12.26	17.3% (39)	9.8% (21)	27.1% (60)
Peer Problem	2.97	2.69-3.25	24.9%(56)	16.9%(38)	41.8% (94)
Emotional Problems	3.35	3.01-3.69	9.8%(22)	12.0%(27)	21.8% (49)
Conduct Problems	2.55	2.29-2.80		16.7% (38)	30% (68)
Hyperactivity Problems	2.60	2.34-2.86	5.3% (12)	3.6%(8)	8.9% (20)
Pro-Social Behaviour	8.83	8.60-9.05	0.9% (2)	3.6% (8)	4.5% (10)

Table 3. Cross tabulation: Emotional Problem score and Type of Work

Emotional Problem Score	Type of Work				
	Domestic work	Shop	Mechanic	Labor work	Other
Normal	4 (33.3%)	108 (82.4%)	20 (71.4%)	14 (73.7%)	30 (85.7%)
Borderline + Abnormal	8 (66.7%)	23 (17.6%)	8 (28.6%)	5 (26.3%)	5 (14.3%)

prevalent (16.9 %), followed by conduct problems (16.7%) and emotional problems (12.0%). The mean scores were 2.97, 2.55, and 3.35 respectively. Pro-social problems and hyperactivity both accounted for a prevalence of 3.6%.

Family environment was found to be a very important risk factor for the development of behavioural problems in children. We cross tabbed different family environments with the TD score and our results showed a significant increase in behavioural problems (p= 0.02).

Among the individual problems, emotional problems were most prevalent in children with a disturbed family environment (p=0.004)

A major contributing factor to the behavioural problems in working children was the work environment and the abusive behaviour that they had to endure. (p=0.005)

The type of work also had a significant effect on the emotional problems although no significant evidence was found for the Total Difficulty Score. Our study also reveals that the type of work has a significant influence on the behaviour of children. Those, who worked as domestic helpers showed a greater prevalence of emotional disturbances as derived from the criteria given in the TD score then those working in shops or factories. The value of our analysis was highly significant (Table 3).

Of the 225 people interviewed, 54.2% (n=122) did not go to school. As reported, 59.8% did not want to go to school, while 29.1% had financial constraints. Peer problems were common among children who reported not going to school (61.7%). A linear by linear association of 0.038 was derived.

The results showed that formal education and probably the school environment helped the children cater for coping up with the stresses in life and at work.

Another interesting finding was that higher family income was linked with a good pro social score even if the children contributed to part of income generation at a young age. The relation was clearly significant.

A very fascinating association between peer problems and the total duration of work was observed. A high frequency (38.3%) of peer problems were found in

those children who had been working for less than a year as compared to 14.9% who had work experience of more than five years ($p=0.041$).

Discussion

The Instrument used in our study is a universally validated screening tool known as "The Strengths and Difficulties Questionnaire" (SDQ). This questionnaire has been compared with other available screening tools such as "The Child Behaviour Check List (CBCL)" and "Rutter questionnaire".¹⁵ The SDQ delivered similar results with added advantages in these comparisons. The Urdu version used in this study has also been validated and is able to discriminate behavioural problems between the study groups.¹⁶ Goodman R in 2001 used SDQ to screen out behavioural problems in Bangladeshi children and found it to be an easy, effective and less expensive for detecting children in the developing world with significant mental health problems.¹⁷

Our study found 9.8% prevalence of Behavioral Problems (an abnormal TDS score) in working children aged 11-16 years. The result is in conformity with other studies in the developing countries. In a cross-sectional study conducted in 2005 in children and adolescents from poor areas of the city of Pelotas in southern Brazil, the Child Behaviour Checklist was used to estimate Behavioural Problems in working children. Researchers found a prevalence of Behavioural Problems among working children to be 21.4% (PR = 1.3; CI 0.9-1.9) and 9.5% (PR = 0.6; CI 0.4-1.0) among adolescents.¹⁸

The mean age of our study children (14.36 years) was consistent with the Bhutta Village study done in Karachi in 2002 (13.91 years).¹⁰ However, the average monthly income found in our study (Rs. 2000) was higher than the Bhutta Village study (Rs. 615).. Similarly, 45 % in the Bhutta Village study were helpers in shops the rest were employed in other businesses¹⁰, while 58.2% children in our study were found to work in the nearby shops. Of the total, 24.2% of the children were unpaid, mostly because they were working in family-owned shops, and some were working as trainees/apprentices who would be paid once they learnt the trade.

In our study, 41.3% of the children toiled for more than 10 hours a day at the workplace.. This finding is consistent with global and the regional average working hours.¹⁹ More than half of child labourers in 26 economically active countries worked more than 9 hours a day, with 4/5ths of them working seven days a week.

A friendly environment at work, was reported by 91% respondents complaining of verbal. and 3.6 % physical abuse. This contradicts other findings where majority of

child workers interviewed reported physical and/or verbal abuse by their employers.²⁰ This could be underreported in our study due to the presence of parents/guardians during the interview..

Unemployment, poverty and illiteracy nexus is evident from our findings. The study children worked for supporting their families for financial gains. Parents in developing countries make use of children's ability to work; therefore, children seem to be much less of an economic burden in developing versus developed countries.¹²

Half of the working children in our study (54%) did not go to school while school attendance by a child is highly correlated with family income. When impoverished children are allowed to work, they will often abandon school to better their family's condition.¹²

Work was enjoyed by 91% of our study children, in contrast to the Bhutta village study in which 79% children did not like to work.¹⁰ Reason why children enjoyed work was because working signifies the onset of economic activity, and leads to the accumulation of experience and development of abilities necessary for the activities they will perform in the future.¹⁸ Also, it is possible that out of respect for parents/ guardians, the children in our study did not state their true feelings about working.

Studies by Smith et al²⁰ have shown the beneficial effects of going to school in protecting children from having behavioural problems especially peer problems. Similar results were also seen in our study proving that healthy interaction among classmates taught these children to better adapt with their colleagues at work. Even though attending school was a protective factor, having friends was associated with Behavioural Problems and Recreational activities were also associated with Conduct problems. Although these facts and figures may seem very strange at the first glance, and contradictory to previous studies,²¹ they may be attributed to the difference in financial and social background of their peers, with whom they are interacting and the low self esteem and stigmatization associated with it.

The type of environment that the child lives in greatly influences the way he behaves. There are studies which have shown an association between family and parental problems with behavioural and emotional problems in children. These studies are in conformity with our results. It is evident that children who face hardships at work and come home to families with frequent quarrelling and disharmony, lose the positive supportive role parents play in their upbringing.^{22,23} We also found a strong relationship between behavioural problems in a child and the environment where he works. It is only appropriate that other studies have also quoted similar findings.

Different professions have different requirements and interactions. A review article produced by a Geneva-based NGO group on child labour showed that type of work particularly traumatic work may cause problems for children ranging from mild depression and low self esteem to severe psychological disorders.²³ In our study we found strenuous work such as a mechanic and a labourer was associated with behavioural problems and domestic work was associated with emotional problems.

Pro-social behaviour was only related to the total amount of family income of the subject. We feel it is because these children have higher self esteem due to their better financial status in the society, allowing them to interact with their peers with confidence.

A convenient non probability sampling strategy, use of SDQ questionnaire, which although is very reliable and validated, is still not comparable to the gold standard psychiatric interview, and inadequate representation of female child pose some limitations to our study despite some very interesting and important findings.

Conclusion and Recommendations

This study depicts a high prevalence of behavioural problems among the study children. Various family and work related factors reported in this study require a different study design with larger sample for establishing any relationship of these factors with the reported behavioural problems among the working children. These factors include family and work environment, attending school, type of work, family income and the time since work started.

Working children is an under-studied population in Pakistan, which are highly vulnerable and require protection. Abolishing child labour is highly desirable but there is a need to carefully examine its dynamics in the context of unemployment-poverty-illiteracy nexus, which is a very complex and tightly woven phenomenon. Keeping the financial and social implications of child labour, we suggest that this issue should be tackled in its broader context. It would be more appropriate if measures were taken to improve the environment of the children and prevent the psychological and behavioural problems associated with the working children. It requires long term strategies for alleviating poverty and includes: promotion of education and reduction of illiteracy; creation of opportunities and support for economic development activities including foreign investment; and also devising transparent mechanisms for creating the job opportunities.

References

1. Child labour robs children of childhood, impedes development. UNICEF. [online] [cited 2006 June 12]. Available from: URL: http://www.unicef.org/media/media_4504.htm.
2. Child Labour and responses in South Asia. ILO-IPEC [online] [cited Mar. 2005]. Available from: URL: <http://www.ilo.org/public/english/region/responses/pakistan/index.htm>.
3. Summary Results of Child Labour Services in Pakistan. [online] [cited Oct. 1996]. Available from: URL: <http://www.ilo.org/public/english/region/asro/newdelhi/ipecc/download/resources/pakistan/pakpub196eng7.pdf>
4. Bekombo M, 1981. "The child in Africa: socialization, education and work." Edited by Rodgers G, Standing G. Geneva, Switz ILO 1981: pp 113-29.
5. Morice A, 1981. "The exploitation of children in the 'informal sector'." Proposal for research. Edited by Rodgers G, Standing G. Geneva, Switz ILO 1981: pp 131-58.
6. Grootaert C, Kanbur R. The World Bank: Child Labour Review. [cited December 1994]. Available from: URL: <http://www.gdsnet.org/classes/Child-Labour-aReview.pdf>.
7. Siddiqi F, Patrinos HA. Child Labor :Issues, Causes and Interventions (HCOWP-56). Human Capital Developmental and Operations Policy Working Paper . [cited 14th Sept. 2001]. Available from: URL: http://siteresources.worldbank.org/EDUCATION/Resources/278200-1099079877269/547664-1099079934475/547667-1135281552767/Child_Labor_issues.pdf
8. 8th Sustainable Development Conference, CSDPD. [Cited Dec. 2005]. Child labour in Pakistan - Daniyal RM. Available from URL: http://www.sdpi.org/8thsdcc/Child-Labor/child_labor_1.htm.
9. Human Right Commission Pakistan. The State of Human Rights in Pakistan [Cited 1999]. Available from URL <http://www.globalmarch.org/worstformsreport/world/pakistan.html>.
10. Tabassum F, Baig LA. Child labor a reality: results from a study of a squatter settlement of Karachi. J Pak Med Assoc 2002; 52: 507-10.
11. Friedman RJ, Chase-Lansdale PL - Chronic Adversities. In: Rutter M, Taylors E, editors. Child and Adolescent Psychiatry (4th ed.) Oxf Blackwell Publishing 2002, pp. 261-76). London.
12. Mathews R, Reis C, Iacopino V. Child labor. A matter of health and human rights. J Ambul Care Manage 2003; 26: 181-82.
13. Myers WE, Valuing Diverse Approaches to Child Labour, in GK Lieten & B White eds. CHILD LABOUR: POLICY OPTIONS 2001.
14. P4-16-SDQ and impact supplement for the parents of 4-10 years old. Urdu version [online] [cited February 2001]. Available from: URL: <http://www.sdqinfo.com/d34.html>.
15. Goodman R. The Strengths and Difficulties Questionnaire: A Research Note. J Child Psychol Psychiatry 1997; 38: 581-86.
16. Samad L, Hollis C, Prince M, Goodman R- Child and adolescent psychopathology in a developing country: testing the validity of the Strengths and a difficulties questionnaire (Urdu version). Int J Methods Psychiatr Res 2005;14: 158-66.
17. Mullick MS, Goodman R. Questionnaire screening for mental health problems in Bangladeshi children: a preliminary study. Soc Psychiatry Psychiatr Epidemiol. 2000; 36:94-99.
18. Benvegna LA, Fassa AG, Facchini LA, Wegman DH, Dall'Agnol MM. Work and behavioural problems in children and adolescents. Int J Epidemiol 2005; 34: 1417-24
19. ILO Child labour and responses- South Asia. [Online] [Cited Nov. 2004]. Available from URL: <http://www.ilo.org/public/english/region/asro/newdelhi/ipecc/download/southasia.pdf>.
20. Carden Smith LK, Fowler SA. Positive peer pressure: the effects of peer monitoring on children's disruptive behavior. J Appl Behav Anal 1984; 17: 213-27.
21. Morrison M, Macdonald G, LeBlanc T. Conduct Problems in Young Children: Effective Early Intervention Strategies. Ocas Journal, March 1999 vol. 43, no.1
22. Rae-Grant N, Thomas BH, Offord DR, Boyle MH. Risk, protective factors, and the prevalence of behavioral and emotional disorders in children and adolescents. Am Acad Child Adolesc Psychiatry. 1989; 28: 262.
23. CRC Sub-Group on Child Labor. [Online] [Cited June 2002]. Available from URL: <http://www.antislavery.org/homepage/resources/Discriminationpaper.pdf>.